Wyoming Game and Fish Department Chronic Wasting Disease Activities for 2013

Methods:

The Wyoming Game and Fish Department (WGFD) conducted surveillance for chronic wasting disease (CWD) in 2013 by focusing on the "leading edge" of the known endemic area. Sampling effort was concentrated in the Green River, Jackson, Lander (Dubois), and Pinedale Regions by utilizing hunter harvest, road-killed, and targeted animals. In addition, the historic endemic area (deer hunt areas 62 - 65, elk hunt area 7) as well as other portions of the state were surveyed opportunistically in an effort to monitor prevalence levels over time.

Hunter harvested deer, elk, and moose samples were collected at points of concentration, i.e., meat processors and check stations. Only retropharyngeal lymph nodes were sampled due to their ease of extraction and suitability as a diagnostic tissue. The WGFD used an enzyme-linked immunosorbent assay (ELISA) to analyze lymph node samples. All positive samples are tested twice on the ELISA, followed by confirmation with immunohistochemistry.

Results were reported to hunters in less than three weeks of sample submission. Hunters could obtain results by accessing the Department's web site and entering their unique identification number that was assigned when their animal was sampled. Hunters having deer or elk testing positive for CWD were also individually notified by letter.

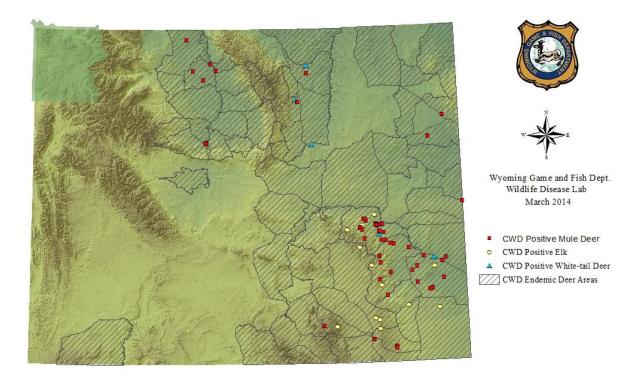
Results and Discussion:

A total of 1,769 deer, elk, and moose samples were analyzed. Of these samples, 73 tested positive for CWD representing 54 mule deer, 5 white-tailed deer, and 14 elk. Chronic wasting disease was not identified outside of the known endemic area in 2013.

The prevalence of CWD in deer harvested within the endemic area increased from 10.5% in 2012 to 13.7% in 2013. The prevalence in elk increased very slightly from 6.5% to 6.6%. Caution should be exercised when interpreting prevalence data. The size of the endemic area for deer is quite large (see hashed area on maps below), while the sample size is relatively small (373 samples in 2013/598 in 2012). Therefore, significant changes in prevalence from year to year may not be reflective of the true prevalence in the population.

As of 2005, the Department incorporated moose into the CWD surveillance program. In 2013, we surveyed 49 hunter-killed, 10 targeted and 10 road-killed moose; all were negative for CWD. This disease has not been identified again in free-ranging moose since the initial case in 2008. For complete information on CWD in Wyoming please go to: http://wgfd.wyo.gov/web2011/wildlife-1000282.aspx

Wyoming Chronic Wasting Disease (CWD) 2013 Positives by Species



Wyoming Chronic Wasting Disease (CWD) 2013 Positive and Negative: All species

